Public Transport

Deutsche Bahn: ptv vision

Rail traffic models

Information and forecasting system for rail travel demand and transport services

What are travellers looking for? The strategic planning department of the Deutsche Bahn AG has to be exactly informed about the public transport demand. However, it is difficult to analyse the transport demand as today's traffic is a very complex topic. At a certain level, the economic evaluation is only possible by using mathematical calculation procedures.

Customer: **Deutsche Bahn AG (German rail network)**

Task: Central information and forecasting system for rail travel demand and transport services

Solution: ptv vision is used for editing the data basics as well as for analysing mobility patterns and customer group preferences.

Thomas Haupt, manager of the business field Traffic Planning VP3 explains: "World-wide it is the first activity-chain-based traffic model for public transport."

For the last 40 years traffic models have been used to provide a differentiated picture of the current traffic demand thus enabling planners to forecast the transportation demand, even under modified conditions.

Since 1999 the Deutsche Bahn Development Group has been working with the planning and simulation software which provides differentiated scenarios for demand impacts on structure, mobility patterns and public transport services.

Activity chains reveal cause and effect

PTV AG was in charge of generating a valid model particularly designed for analysing the demand in motorised public transport. In a first step, this project included the generation (calculation of originating travel demand) and selection of destination. A new project will cover the demand assignment to the means of transportation and it will also include a household survey on transport mode choices.

Mobility, displayed in the model, shows motorised routes taken by train travellers in Germany as well as Germany-related mobility abroad.

The demand is divided into groups of people and purpose of journey by using a behaviour-orientated activity chain model. A clustering procedure distinguishes the different groups of people. The selection criterion is the consumer's behaviour with regard to public transport demand and car owners.

ptv traffic mobility logistics.